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09/892,198	06/25/2001	Dan Newell	294438001US1	9950

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PERKINS COIE LLP  
PATENT-SEA  
P.O. BOX 1247  
SEATTLE, WA 98111-1247

EXAMINER
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HAILU, TADESSE

ART UNIT	PAPER NUMBER
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2173

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9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

09/892,198

Applicant(s)

NEWELL ET AL.

Examiner

Tadesse Hailu

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11, 14-20, 22, 23, 30-39, 47-80, 82-86, 89-93 and 95-101 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11, 14 and 15 is/are allowed.
- 6) ☐ Claim(s) 16-20, 22, 23, 30-39, 47-55, 57-70, 73-76, 79, 80, 82-86, 89-93 and 95-101 is/are rejected.
- 7) ☐ Claim(s) 56, 71, 72, 77 and 78 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. This Office Action is in response to the patent application (09/892,198) filed on June 25,2001.
2. The present patent application is a continuation of application No. 09/216,193, filed on December 18, 1998.
3. the submitted Information Disclosure Statement is considered and entered in the application file.
4. the pending claims 1-11, 14-20, 22, 23, 30-39, 47-80, 82-86, 89-93, 95-101 are examined as follows:

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 85 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 85 recites the limitation "the computer system" in line 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 16-20, 22, 23, 30-39, 47-55, 57-70, 73-76, 79, 84-86, 89-93, 95, and 98-101 are rejected under 35 U.S.C. 102(e) as being anticipated by Theimer et al (US 5, 493,692).

With regard to claim 16:

Theimer describes a computer-implemented method for providing information tailored to the profiles of a user. The user agent gathers and manages personal specific information and personal policies and preferences of the user from user profile. Based on the gathered or collected information, the information is sent to the user and the information is presented in a selected appropriate output. For example, outputting the information on a smallest display, when other people are around the user, or outputting the information audibly, to hide from nearby people. (column 9, lines 60-column 10, lines 7; column 13, lines 5-40; column 24, lines 49-column 25, and lines 67 ).

With regard to claim 17:

As per “the received information includes information related to a current condition of the user, and including modeling the user property based on the received information.” (column 13, lines 5-40).

With regard to claim 18:

As per “monitoring the user to collect the received information.” (column 9, lines 60-column 10, lines 7).

With regard to claim 19:

As per “the received information includes information related to a surrounding environment, and including modeling the user property based on the received information.” (column 13, lines 5-40).

With regard to claim 20:

As per “monitoring the surrounding environment to collect the received information.” (column 13, lines 5-40; column 17, lines 33-51).

With regard to claim 22:

As per “before the presenting of the output information, receiving the output information.” (column 13, lines 5-40).

With regard to claim 23:

As per “an information provider transmits information to various computers within a transmission range of the information provider, wherein the method is performed by a transportable computer transported by the user, wherein the user transports the transportable computer within the transmission range, and wherein the received output information is the transmitted information.” (fig. 1, column 5, lines 27-64).

With regard to claim 30:

As per “the modeled user property is an indication of ability of the user to devote attention to the presenting of the output information.” (column 13, lines 22-40, column 24, lines 17-31, column 25, lines 17-26).

With regard to claim 31:

As per “the ability of the user to devote attention is influenced by information being received by the user via one user sense, and wherein the presenting of the output information is selected to be via a distinct user sense.” (column 13, lines 22-40, column 24, lines 17-31, column 25, lines 17-26).

With regard to claim 32:

As per “deferring the presenting of the output information when the ability of the user to devote attention is low.” (column 23, lines 50-67; column 25, lines 55-67).

With regard to claim 33:

As per “the indication of the ability of the user to devote attention is an estimate of an amount of attention devoted by the user to other current activities.” (column 23, lines 50-67; column 25, lines 55-67).

With regard to claim 34:

As per “the modeled user property is a preference of the user for an amount of people to perceive presented information.” (column 13, lines 22-40).

With regard to claim 35:

As per “the selected output device includes a range of information presentation capabilities, wherein others can perceive information presented using some of the information presentation capabilities, and including selecting those information presentation capabilities to be used for the presenting when the modeled user property indicates that the others are within the amount of people to perceive the output information.” (column 13, lines 22-40, column 24, lines 17-31).

With regard to claim 36:

As per “the selected output device includes a range of information presentation capabilities, wherein others nearby cannot perceive information presented using some of the information presentation capabilities, and including selecting those information presentation capabilities to be used for the presenting when the modeled user property indicates that the others exceed the amount of people to perceive the output information.” (column 13, lines 22-40, column 24, lines 17-31, column 25, lines 17-26).

With regard to claim 37:

As per “the modeled user property is a preference of the user for how to receive sensitive information.” ( column 25, lines 55-67).

With regard to claim 38:

As per “the selected output device includes a range of information presentation capabilities, wherein others can perceive information presented using some of the information presentation capabilities, and including selecting those information presentation capabilities to be used for the presenting when the modeled user property indicates that sensitivity of the output information allows the others to perceive the output information.” (column 13, lines 22-40, column 24, lines 17-31).

With regard to claim 39:

As per “the selected output device includes a range of information presentation capabilities, wherein others nearby cannot perceive information presented using some of the information presentation capabilities, and including selecting those information presentation capabilities to be used for the presenting when the output information is sufficiently sensitive

that the modeled user property indicates that the others are not allowed to perceive the output information.” (column 13, lines 22-40, column 24, lines 17-31, column 25, lines 17-26).

With regard to claim 47:

As per “a plurality of output devices are available to present information via distinct senses of the user, and wherein the selecting of the output device includes determining a user sense which is capable of presenting the output information in accordance with the modeled user property.” (column 23, lines 38-column 24, lines 50).

With regard to claim 48:

As per “the selected output device has only a single physical mechanism for presenting the output information to the user.” (column 23, lines 38-column 24, lines 50).

With regard to claim 49:

As per “a fixed output devices become available to the computer when the user transports the computer near the fixed output devices, and wherein the selected output device is a fixed output device.” (column 22, lines 47-59).

With regard to claim 50

As per “a user computer performing the method is transportable by the user, and wherein the user computer can communicate with other devices within a transmission range of the user computer.” (Theimer, column 23, lines 50-67).

With regard to claim 51:

As per “the user computer communicates with another computer, and wherein the selected output device is an output device of the another computer.” (Theimer, fig.1, column 22, lines 47-59)



With regard to claim 52:

As per “the received information is from one of the other devices.” (Theimer, column 22, lines 47-59).

With regard to claim 53:

As per “the output information to be presented is received from one of the other devices.” (Theimer, fig.1, column 22, lines 12-59).

With regard to claim 54:

As per “after the presenting of the output information, revising the modeled user property based on the presenting.” (Theimer, column 13, lines 5-13).

With regard to claim 55:

As per “the modeled user property indicates capabilities of the user for receiving presented output information.” (Theimer, column 7, lines 1-20, column 13, lines 60-column 14, lines 6).

With regard to claim 57:

Independent claim 57, while not necessary identical in scope, contain limitations similar to independent claim 16 and therefore is rejected under the same rationale.

With regard to claim 58:

As per “receiving output information to be presented in accordance with the determined current values of the modeled user properties; and presenting the output information to the user in accordance with the modeled user properties.” (Theimer, column 22, lines 12-column 23, lines 34).

With regard to claim 59:

As per “when a program has output information to present to the user, supplying the determined current values of the modeled user properties to the program so that the output information can be presented to the user by the program in accordance with the modeled user properties.” (Theimer, column 22, lines 12-column 23, lines 34).

With regard to claim 60:

As per “when determined current values of the modeled user properties change, automatically supplying the changed current values to the program so that the output information can be presented in accordance with the changed current values of the modeled user properties.” (Theimer, column 15, lines 5-14).

With regard to claim 61:

As per “the determining of the current value for the property is based on a plurality of modeling rules.” (Theimer, column 13, lines 5-13).

With regard to claim 62:

As per “when the user is in a specified class of users, using modeling rules specialized for the specified class.” (Theimer, column 13, lines 22-40).

With regard to claim 63:

As per “when the user is not in a predetermined class of users, using default modeling rules.” (Theimer, column 15, lines 5-14).

With regard to claim 64:

As per “updating the modeling rules based on the received information so as to better model the user.” (column 10, lines 3-7; column 13, lines 5-13).

With regard to claim 65:

As per “the computer can communicate with another computer, and including receiving from the another computer new modeling rules to be used for the determining of the current value.” (Theimer, column 13, lines 5-40).

With regard to claim 66:

As per “the computer can communicate with another computer, the another computer able to obtain information about the user via input devices of the another computer, and wherein the received information is obtained information about the user from the another computer.” (fig. 1, column 5, lines 48-64).

With regard to claim 67:

As per “the computer can communicate with another computer, and including receiving from the another computer information about properties of the user to be added to the modeled user properties, the added properties distinct from the modeled user properties.” ( Theimer, column 8, lines 45-column 9, lines 20).

With regard to claim 68:

As per “the computer can communicate with another computer, and including receiving from the another computer a value for one of the modeled user properties to be stored as the determined current value for the one property.” (column 8, lines 45-column 9, lines 20).

With regard to claim 69:

As per “the plurality of properties of the user are modeled based on received information to create a model of a user condition.” (column 8, lines 45-column 9, lines 20).

With regard to claim 70:

As per “monitoring the user to obtain the received information.” (column 8, lines 45-column 9, lines 20).

With regard to claim 73:

As per “determining that a current value for a user property is needed for presenting output information to the user; and obtaining information related to the user property to allow determination of the current value.” (column 17, lines 13-25).

With regard to claim 74:

As per “A method for presenting output information to a user of a computer, the computer able to output information to a first display device and a second display device, the first and second display devices having different display characteristics, the method comprising: selecting either the first display device or the second display device based on a predicted preference of the user, the predicted preference indicating on which of the display devices the user would prefer to receive the output information; and presenting the output information on the selected display device consistently with the predicted preference.” (column 15, lines 12-21; column 24, lines 29-31; column 28, lines 1-16).

With regard to claim 75:

As per “predicting a current value of the preference before the selecting.” (column 13, lines 62-67).

With regard to claim 76:

As per “monitoring the user to obtain information for the predicting.” (column 8, lines 45-58).

With regard to claim 79:

As per “the computer and the display devices are designed to be carried by the user.” (see fig. 1, #26).

With regard to claim 84 :

Independent claim 84 corresponds generally to independent claim 16 and recites similar features in storage form, and therefore is rejected under the same rationale.

With regard to claim 85:

As per “the at least one modeled characteristic is based on collected information related to the user.” (column 9, lines 60-66; column 10, lines 28-38).

With regard to claim 86:

As per “the computer system is further controlled by monitoring the user to obtain the collected information.” (column 9, lines 60-66; column 10, lines 28-38).

With regard to claim 89 :

Independent claim 89 corresponds generally to independent claim 16 and recites similar features in system form, and therefore is rejected under the same rationale.

With regard to claim 90:

As per “the computer system further comprising the selected output device.” (column 28, lines 12-16).

With regard to claim 91:

As per “a model of a current condition of the user, the model including a plurality of user properties including the modeled property.” (column 9, lines 60-column 10, lines 21; column 13, lines 5-40).

With regard to claim 92:

As per “a user characterization module that generates the modeled property based on collected information related to the user or to a surrounding environment.” (column 9, lines 60-column 10, lines 21).

With regard to claim 93:

As per “the user characterization module further monitors the user or the surrounding environment to obtain the collected information.” (column 9, lines 60-column 10, lines 21; column 10, lines 39-54).

With regard to claim 95:

As per “ the selected output device includes a range of information presentation capabilities, and further including a format module that formats the output before the presenting, the formatting to select information presentation capabilities of the selected output device to be used such that the selected information presentation capabilities are consistent with the modeled property.” (column 25, lines 18-51; column 26, lines 1-22; 28, lines 1-16).

With regard to claim 98:

Independent claim 98 corresponds generally to independent claim 16 and recites similar features in a data structure format that is stored in the memory of a computer, and therefore is rejected under the same rationale.

With regard to claim 99:

As per “a defined interface to receive updates to the modeled information from another computer.” (see Figs. 1 and 2, column 18, lines 50-62).

With regard to claim 100:

As per "the data structure further contains a plurality of modeling rules useful for determining based on received information about the user a current value for the modeled ability or desire." (column 13, lines 5-40).

With regard to claim 101:

As per "the modeling rules are useful for mediating inconsistencies between multiple pieces of information which relate to the modeled ability or desire so as to determine the current value." (column 13, lines 5-40).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7.. Claims 80, 82 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer (US 5,493,692) in view Stephen Fickas, et al " Software Organization for Dynamic and Adaptable Wearable systems," 1997.

With regard to claim 80:

Theimer describes a method for a computer to present output information to a user holding a hand held computer, the hand held computer having a plurality of output devices (sound output and visual display) from which the user can receive information, the method comprising: monitoring the user to collect information (column 9, lines 60-66); characterizing the user based on the collected information so as to identify an ability of the user to currently receive the output information and a desire of the user of how to currently receive the output

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information (column 10, lines 3-38); selecting one of the plurality of output devices such that information presentation capabilities of the selected output device support the identified ability and desire (column 25, lines 27-45); and presenting the output information to the user on the selected output device consistently with the identified ability and desire.” (column 10, lines 10-19, column 15, lines 12-21, column 24, lines 29-31, column 28, lines 1-16). However, Theimer instead of using a wearable computer to present the output information to a user, he uses hand held computing device. Fickas discloses wearable computer to output information to a user. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use a wearable computer in place of the hand held computer of Theimer because computing large amount of data have been a highly desirable feature in mobile processing.

With regard to claim 82:

As per “receiving the output information from an application program executing on the wearable computer.” (Fickas, sections 3, 4)

With regard to claim 83:

As per “the wearable computer has multiple display devices worn by the user, the multiple display devices having distinct information presentation capabilities, and wherein the selecting of one of the plurality of output devices selects one of the multiple display devices.” (Fickas, figs 1, 2, section 4).

8. Claims 96-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer (US 5,493,692) in view of Picard, et al “Affective Wearables,1997, MIT.

With regard to claims 96 and 97:



While Theimer describes several sensor in order to monitor and to collect information about the user. but said several sensors does not include a bio-monitoring sensor that receive information about the user health condition, and alerting another person of a health problem detected from the current physiological information. Picard describes a bio-monitoring sensor for sensing physiological pattern of a user of the wearable computer. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate several sensors in Theimer system devices, specially the bio-monitoring sensor because monitoring the health of a user during computing is desirable feature that needs to be given a priority.

*Allowable Subject Matter*

9. Claims 1-11, 14 and 15 are allowed.

The following is an examiner's statement of reasons for allowance: although Theimer describes a computer-implemented method for providing information tailored to the profiles of a user, but Theimer fails presenting the output information in a manner consistent with the modeled current user condition by, selecting one of the plurality of output devices such that information presentation capabilities of the selected output device support the determined current desired level of privacy, the determined current desired scope of audience, and the determined current cognitive load as claimed in claims 1-11, 14, and 15.

Thus, prior art neither renders obvious nor anticipates the combination of claimed elements in light of the specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. Claims 56, 71, 72, 77 and 78 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:.  
The prior art of records fails to describe the following: "the capabilities indicate that a physical disability of the user prevents the user from perceiving some types of presentations of information, and wherein the presenting of the output information is in a manner perceivable by the user." (of claim 56); "multiple pieces of information are received which relate to a property of the user, wherein the multiple pieces of information are inconsistent as to the current value for the property, and wherein the determining of the current value involves mediating the inconsistencies." (of claim 71); "a rating indicating quality of the received information is received, and wherein the quality rating is reflected in the determined current values for the properties which relate to the received information." (of claim 72); "the predicted preference is a predicted mental state of the user, and wherein a mapping between the predicted mental state and the display devices is used for the selecting, the mapping indicating which of the display devices are suitable for presenting information in accordance with various predicted mental states." (of claim 77 and 78).

Thus, prior art neither renders obvious nor anticipates the combination of claimed elements in light of the specification.

***Conclusion***

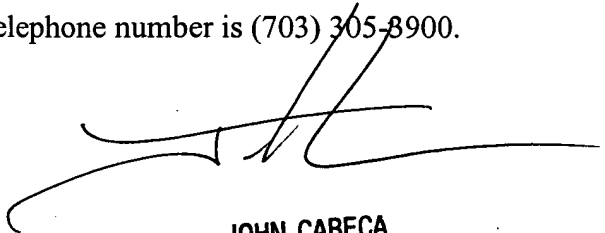
11. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R § 1.111(c) to consider this reference fully when responding to this action. The document cited, Mizokawa therein teach a method in a control system (assist system) which allows outputting adequate and satisfactory value or information to a user (Mizokawa, summary). In order to attain the above objective, Mizokawa provides an autonomous device behaving adaptively to a user, including, among other things, ( a sensing unit (for receiving information about a modeled property of the user ), a behavior control unit (which selects an output device capable of presenting the output information ); and an output device for outputting information in accordance with the controlled behavior (property) (column 1, lines 50-column 2, lines 39). These teaching of Mizokawa correspond to the recited independent claims 16, 57, 74, 80, 84, 89, and 98 of the present invention.

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tadesse Hailu, whose telephone number is (703) 306-2799. The Examiner can normally be reached on M-F from 10:00 - 8:30 ET. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Cabeca, can be reached at (703) 308-3116 Art Unit 2173 CPK 2-4A51.

13. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-8900.

*Tadesse Hailu*

Dec 5, 2003



JOHN CABECA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 21